CALIFORNIA WATER QUALITY CONTROL BOARD SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM ORDER NO. 94-28 FOR

CITY OF SAN DIEGO, ALLRED COLLINS PARTNERSHIP, AND U.S. NAVY SOUTH MIRAMAR LANDFILL CITY OF SAN DIEGO

Monitoring and Reporting Program No. 94-28 is an interim monitoring program and shall be in effect until a revised monitoring and reporting program can be implemented after review of technical information required by Order No. 94-28, or as requested by the Executive Officer to demonstrate compliance with California Code of Regulation Title 23, Division 3, Chapter 15, Article 5 requirements.

A. MONITORING PROVISIONS

- 1. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or a laboratory approved by the Executive Officer. Specific methods of analysis must be identified. If methods other than U. S. EPA approved methods or Standard Methods are used, the exact methodology must be submitted for review and must be approved by the Executive Officer prior to use. The director of the laboratory whose name appears on the certification shall supervise all analytical work in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.
- 2. If the discharger monitors any pollutants more frequently than required by this Order, using the most recent version of Standard U. S. EPA Methods, or as specified in this Order, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.
- 3. The discharger shall report all instances of noncompliance not reported under Reporting Requirement D.5 of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Reporting Requirement D.5.
- Sample collection, storage, and analysis shall be performed according to the most recent version of Standard U. S. EPA Methods, and in accordance with an approved sampling and analysis plan.
- 5. All monitoring instruments and equipment used by the discharger to fulfill the prescribed monitoring program shall be properly calibrated and maintained as necessary to ensure their continued accuracy.

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- 6. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and copies of all reports required by this Order. Records shall be maintained for a minimum of five years. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Executive Officer.
- 7. Records of monitoring information shall include:
 - Identity of sample and of the Monitoring Point or Background Monitoring Point from which it was taken, along with the identity of the individual who obtained the sample;
 - b. Date and time of sampling;
 - c. Date and time that analyses were started and completed, and the name of the personnel performing each analysis;
 - d. Complete procedure used, including method of preserving the sample and the identity and volumes of reagents used;
 - e. Calculation of results; and
 - f. Results of analyses, and the MAL and PQL for each analysis.
- 8. The monitoring reports shall be signed by an authorized person as required by Reporting Requirement D.10.

B. SAMPLING AND ANALYTICAL METHODS

The discharger is responsible for ensuring that the laboratory analysis of all samples from Monitoring Points and Background Monitoring Points meets the following restrictions:

1. The methods of analysis and the detection limits used must be appropriate for the expected concentrations. For detection monitoring of any constituent or parameter that is found in concentrations which produce more than 90% non-numerical determinations [i.e., "trace" or "ND"] in data from Background Monitoring Points for that medium, the analytical method having the lowest "method detection limit [MAL]" shall be selected from among those methods which would provide valid results in light of any "Matrix Effects" involved.

- 2. Analytical results falling between the MAL and the practical quantification limit [PQL] shall be reported as "trace", and shall be accompanied both by the (nominal or estimated) MAL and PQL values for that analytical run and by an estimate of the constituent's concentration.
- 3. MDLs and PQLs shall be derived by the laboratory for each analytical procedure, according to State of California laboratory accreditation procedures. These nominal MDLs and PQLs shall reflect the detection and quantification capabilities of the specific analytical procedure and equipment used by the lab, rather than simply being quoted from U. S. EPA analytical method manuals. If the lab suspects that, due to a change in matrix or other effects, the true detection limit or quantification limit for a particular analytical run differs significantly from the laboratory-derived nominal MAL/PQL values, the results shall be flagged accordingly, along with an estimate of the detection limit and quantification limit actually achieved.
- 4. All QA/QC data shall be reported, along with the sample results to which it applies, including the method, equipment, and analytical detection limits, the recovery rates, an explanation for any recovery rate that is less than 80%, the results of equipment and method blanks, the results of spiked and surrogate samples, the frequency of quality control analysis, and the name and qualifications of the person(s) performing the analyses. Sample results shall be reported unadjusted for blank results or spike recovery. In cases where contaminants are detected in QA/QC samples (i.e. field, trip or lab blanks), the accompanying sample results shall be appropriately flagged.
- 5. Upon receiving written approval from the Executive Officer, an alternative statistical or non-statistical procedure can be used for determining the significance of analytical results for a constituent that is a common laboratory contaminant (i.e., methylene chloride, acetone, diethylhexyl phthalate, and di-n-octyl phthalate) during any given Reporting Period in which QA/QC samples show evidence of laboratory contamination for that constituent. Nevertheless, analytical results involving detection of these analytes in any background or downgradient sample shall be reported and flagged for easy reference by Regional Board staff.
- 6. Unknown chromatographic peaks shall be reported, along with an estimate of the concentration of the unknown analyte. When unknown peaks are encountered, second column or second method confirmation procedures shall be performed to attempt to identify and more accurately quantify the unknown analyte.
- 7. The MAL and PQL shall be determined in accordance with the definitions of those terms contained in this Order.

C. REPORTS TO BE FILED WITH THE BOARD

All reports shall be submitted no later than one month following the end of their respective Reporting Period. The reports shall be comprised of at least the following in addition to the specific contents listed for each respective report type:

1. Transmittal Letter

- a. A letter summarizing the essential points shall be submitted with each report. If the discharger has previously submitted a detailed time schedule for correcting said requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. This letter shall include:
 - 1) A discussion of any requirement violations found since the last such report was submitted. However, if no violations have occurred since the last submittal, this shall be stated in the transmittal letter;
 - 2) Describe actions taken or planned for correcting those violations; and
 - A statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true, complete, and correct;
- b. For Detection Monitoring and COC Reports only, a compliance evaluation summary shall contain at least:
 - 1) For each monitored ground water body, a description and graphical presentation (e.g. arrow on map) of the velocity and direction of ground water flow under/around the Unit, based upon water level elevations taken during the collection of the water quality data submitted in the report;
 - 2) Pre-Sampling Purge for Samples Obtained From Wells: For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used both before sampling to remove stagnant water in the well, and after sampling to remove the water that was in the well bore while the sample was being taken; and
 - Sampling: For each Monitoring Point and Background Monitoring Point addressed by the report, a description of the type of pump -- or other device -- used and its vertical placement for sampling, and a detailed description of the sampling procedure [number and description of the samples, field blanks, travel blanks, and duplicate samples taken, the type

of containers and preservatives used, the date and time of sampling, the name and qualifications of the person actually taking the samples, and any other observations];

- c. A map (or copy of an aerial photograph) showing the locations of observation stations, Monitoring Points, and Background Monitoring Points;
- d. For each Detection Monitoring and COC Reports only, laboratory results of all analyses in compliance with Section B of this Monitoring and Reporting Program (MRP);
- e. A statement as to the condition and performance of any leachate monitoring and control facilities, and of the run-off/run-on control facilities;
- f. The quantity and types of wastes discharged and the locations in the Unit where waste has been placed since submittal of the last such report.

2. Contingency Reporting

- a. The discharger shall report by telephone concerning the discovery of any previously unreported seepage from the disposal area. A written report shall be filed with the Regional Board within seven days, containing at least the following information:
 - 1) A map showing the location(s) of seepage;
 - 2) An estimate of the flow rate;
 - 3) A description of the nature of the discharge (e.g., all pertinent observations and analyses); and
 - corrective measures approved (or proposed for consideration) by the Executive Officer.
- b. Should the initial statistical comparison [F.1 of this MRP] or non-statistical comparison [F.2 of this MRP] indicate, for any COC or Monitoring Parameter, that a release is tentatively identified, the discharger shall immediately notify their designated Regional Board staff contact verbally as to the Monitoring Point(s) and constituent(s) or parameter(s) involved, shall provide written notification by certified mail within seven days of such determination [23 CCR §2550.8(j)(1)], and shall carry out a discrete retest in accordance with F.3 of this MRP. If the retest confirms the existence of a release, the discharger shall carry out the requirements of C.2d of this MRP. The discharger shall inform the Regional

Board of the outcome of the retest as soon as the results are available, following up with written results submitted by certified mail within seven days of completing the retest.

- c. If either the discharger or the Executive Officer determines that there is significant physical evidence of a release [23 CCR §2550.1(3)], the discharger shall conclude that a release has been discovered and shall: (A) immediately notify the Regional Board of this fact by certified mail [or acknowledge the Regional Board's determination]; (B) carry out the requirements of C.2.d. of this MRP for all potentially-affected monitored media; and (C) carry out any additional investigations stipulated in writing by the Executive Officer for the purpose of identifying the cause of the indication.
- d. If the discharger concludes that a release has been discovered:
 - If this conclusion is <u>not</u> based upon monitoring for all COC, pursuant to E.3 of this MRP, then the discharger shall sample for all COC at all Monitoring Points in the affected medium and submit them for laboratory analysis within thirty days of discovery. Within seven days of receiving the laboratory analytical results, the discharger shall notify the Regional Board, by certified mail, of the concentration of all COC at each Monitoring Point: this notification shall include a synopsis showing for each Monitoring Point, those constituents that exhibit an unusually high concentration. Because this scan is not to be tested against background, only a single datum is required for each COC at each Monitoring Point [23 CCR §2550.8(k)(1)];
 - The discharger shall, within 90 days of discovering the release, submit a Revised Report of Waste Discharge proposing an Evaluation Monitoring Program that: 1) meets the requirements of 23 CCR §2550.8(k)(5) and §2550.9; and 2) satisfies the requirements of 40 CFR 258.55(g)(1)(ii).
 - The discharger shall, within 180 days of discovering the release, submit a preliminary engineering feasibility study meeting the requirements of 23 CCR §2550.8(k)(6).
 - The discharger shall immediately begin delineating the nature and extent of the release by installing and monitoring assessment wells as necessary to assure that the discharger can meet the requirement [23 CCR §2550.9(b)] to submit a delineation report within 90 days of when the Regional Board directs the discharger to begin the Evaluation Monitoring Program. This report shall show the vertical and horizontal limits of the release for all Constituents of Concern. This delineation effort shall be

carried out in addition to any outgoing monitoring program (e.g., detection monitoring program); nevertheless, the discharger's delineation effort shall encompass all relevant monitoring data.

- e. Any time the discharger concludes (or the Executive Officer directs the discharger to conclude) that a release from the Unit has proceeded beyond the facility boundary, the discharger shall so notify all persons who either own or reside upon the land that directly overlies any part of the plume [Affected Persons].
 - Initial notification to Affected Persons shall be accomplished within 14
 days of making this conclusion and shall include a description of the
 discharger's current knowledge of the nature and extent of the release; and
 - 2) Subsequent to initial notification, the discharger shall provide updates to all Affected Persons, including any persons newly affected by a change in the boundary of the release, within 14 days of concluding there has been any material change in the nature or extent of the release.
 - 3) Each time the discharger sends a notification to Affected Persons [under C.2.(e)(1 or 2), above], the discharger shall provide the Regional Board, within seven days of sending such notification, with both a copy of the notification and a current mailing list of Affected Persons.

3. Annual Summary Report

The discharger shall submit an annual report to the Regional Board covering the previous monitoring year. The annual Reporting Period ends March 31. This report may be combined with the winter/spring detection monitoring report under sections D and E.2 of this MRP, and shall meet the requirements of C.1 of this MRP in addition to the following:

a. A Graphical Presentation of Analytical Data [23 CCR §2550.7(e)(14)]. For each Monitoring Point and Background Monitoring Point, submit in graphical format the laboratory analytical data for all samples taken within at least the previous five calendar years. Each such graph shall plot the concentration of one or more constituents over time for a given Monitoring Point or Background Monitoring Point, at a scale appropriate to show trends or variations in water quality. The graphs shall plot each datum, rather than plotting mean values. For any given constituent or parameter, the scale for background plots shall be the same as that used to plot downgradient data. On the basis of any aberrations noted in the plotted data, the Executive Officer may direct the discharger to carry out a

preliminary investigation [23 CCR §2510(d)(2)], the results of which will determine whether or not a release is indicated;

- b. All monitoring analytical data obtained during the previous two six-month (Monitoring Parameter) Reporting Periods, shall be presented in tabular form as well as on diskettes, either in MS-DOS/ASCII format or in another file format acceptable to the Executive Officer. Data sets too large to fit on a single diskette may be submitted on disk in a commonly available compressed format [e.g., PK-ZIP or NORTON BACKUP] acceptable to the Executive Officer. The Regional Board regards the submittal of data in hard copy and on diskette as "...the form necessary for..." statistical analysis [23 CCR §2550.8(h)], in that this facilitates periodic review by the Regional Board's statistical consultant;
- A comprehensive discussion of the compliance record, result of any corrective actions taken or planned which may be needed to bring the discharger into full compliance with the waste discharge requirements;
- d. A map showing the area, if any, in which filling has been completed during the previous calendar year;
- e. A written summary of the monitoring results and monitoring system(s), indicating any changes made or observed since the previous annual report; and
- f. For units having leachate monitoring/control facilities, an evaluation of their effectiveness, pursuant to 23 CCR §2543(b,c, & d).

D. ON-SITE OBSERVATIONS

An On-Site Observations Report shall be submitted semiannually containing the following information:

1. Allred Collins Business Park East

Semi-annual Inspection of asphalt surface pavement, to evaluate the effectiveness of the final site cover that may be degraded by the effects of settling, subsidence, and erosion.

Semi-annual Inspection of surface drainage to evaluate evidence of run-on and run-off that might adversely affect the integrity of the final cover.

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Semi-annual Inspection of the monitoring facilities including the lysimeters, unsaturated zone wells, landfill gas monitoring systems, and leachate monitoring wells.

Semi-annual Inspection of landscaping planters for obvious cracks or containment failures.

2. South Miramar Landfill

Semi-annual Inspection and maintenance of groundwater monitoring wells, alluvial monitoring wells, and vadose zone monitoring wells.

Semi-annual Inspection of soil cover and slopes to evaluate the effectiveness of the final site cover that may be degraded by the effects of settling, subsidence, and erosion.

3. Sander Site

Semi-annual Inspection of soil cover and slopes to evaluate the effectiveness of the final site cover that may be degraded by the effects of settling, subsidence, and erosion.

E. GROUND WATER AND UNSATURATED ZONE GAS SAMPLING/ANALYSIS FOR DETECTION MONITORING

Monitoring Parameter Report Due Semiannually, Constituent of Concern Reports Due Every Five Years (details below)

1. Thirty-Day Sample Procurement Limitation.

a. For any given monitored medium, samples shall be taken from all Monitoring Points and Background Monitoring Points to satisfy the data analysis requirements for a given Reporting Period shall all be taken during the latter third of the Reporting Period within a span not exceeding 30 days, and shall be taken in a manner that insures sample independence to the greatest extent feasible [23 CCR §2550.7(e)(12)(B)]. Sample procurement shall be carried out as late in the Reporting Period as feasible, considering the time needed to analyze the samples, analyze the resulting data, and to prepare and submit the monitoring report within thirty days after the end of the Reporting Period.

- b. Ground water sampling shall also include an accurate determination of the ground water surface elevation and field parameters [temperature, electrical conductivity, turbidity] for that Monitoring Point or Background Monitoring Point [23 CCR §2550.7(e)(13)]. Ground water elevations taken prior to purging the well and sampling for Monitoring Parameters shall be used to fulfill the Spring and Fall ground water flow rate/direction analyses required under E.6 of this MRP.
- c. Statistical or non-statistical analysis shall be carried out as soon as the monitoring data is available, in accordance with Section F of this MRP.
- 2. "Indirect Monitoring" for Monitoring Parameters Done Semiannually. For each monitored ground water body, all Monitoring Points assigned to Detection Monitoring [under E.4 of this MRP] and all Background Monitoring Points shall be monitored once each Spring and Fall. Reporting Periods end on March 31, and September 30, respectively] for the Monitoring Parameters listed in Discharge Specification B.5 of this Order. Monitoring for Monitoring Parameters shall be carried out in accordance with E.1 and Section F of this MRP.
- 3. "Direct Monitoring" of All Constituents of Concern Every Five Years. In the absence of a release being indicated pursuant to E.2 and F.3 of this MRP, the discharger shall monitor all COC and submit a COC report as follows: for all COC every fifth year, beginning with Spring 1996 (first reporting period ends March 31, 1996), with subsequent COC monitoring efforts being carried out every fifth year thereafter alternating in the Fall [Reporting Period ends September 30] and Spring [Reporting Period ends March 31].
- 4. Monitoring Points and Background Monitoring Points For Each Monitored Medium: The discharger shall sample the following Monitoring Points and Background Monitoring Points in accordance with the sampling schedules given under E.2 and E.3 of this MRP, taking enough samples to qualify for the most appropriate test under Section H of this MRP. The monitoring reporting program No. 94-28 is an interim monitoring program and shall be in effect until a revised Monitoring and Reporting program can be implemented after review of technical information required by Order No. 94-28, or as requested by the Executive Officer to demonstrate compliance with California Code of Regulation Title 23, Division 3, Chapter 15, Article 5 requirements.
 - a. For water quality monitoring of South Miramar Landfill the following monitoring shall be performed (attachment 1):
 - (1) Ground water the Monitoring Points shall be South Miramar Monitoring Wells (SMMW) SMMW-1, SMMW-2, SMMW-3, SMMW-4, SMMW-5, SMMW-6, SMMW-7, and SMMW-8.

- (2) Shallow perched ground water the Monitoring Points shall be South Miramar Alluvial Monitoring Well (SMAMW) SMAMW-1.
- (3) Vadose zone Monitoring Points shall be monitoring wells SMVMW-1, SMVMW-2, SMVMW-3, SMVMW-4, SMVMW-5, SMVMW-6, and SMVMW-7.
- b. For water quality monitoring of Allred Collins Business Park east monitoring shall include lysimeter well 1, leachate monitoring wells 1 & 2, and the 8 landfill gas monitoring probes (attachment 2).
- 5. Initial Background Determination: For the purpose of establishing an initial pool of background data for each COC at each Background Monitoring Point in each monitored medium [23 CCR §2550.7(e)(6)]:
 - a. Whenever a new COC is added to the Water Quality Protection Standard, including any added by the adoption of this Order, the discharger shall collect at least one sample quarterly for at least one year from each Background Monitoring Point in each monitored medium and analyze for the newly-added constituent(s); and
 - b. Whenever a new Background Monitoring Point is added, including any added by this Order, the discharger shall sample it at least quarterly for at least one year, analyzing for all COC and Monitoring Parameters.
- 6. Quarterly Determination of Ground Water Flow Rate/Direction [23 CCR §2550.7(e)(15)]: For each monitored ground water body, the discharger shall measure the water level in each well and determine ground water flow rate and direction at least quarterly, including the times of expected highest and lowest elevations of the water level for the respective ground water body. Ground water elevations for all background and downgradient wells for a given ground water body shall be measured within a period of time short enough to avoid temporal variations in ground water flow which could preclude accurate determination of ground water flowrate and direction [40 CFR 258.53(d)]. This information shall be included in the twice-yearly monitoring reports required under E.2 of this MRP.

F. STATISTICAL AND NON-STATISTICAL ANALYSIS OF SAMPLE DATA DURING A DETECTION MONITORING PROGRAM

- 1. The discharger shall use the most appropriate of the following methods to compare the downgradient concentration of each monitored constituent (or parameter) with its respective background concentration to determine if there has been a release from the Unit. For a constituent that qualifies for statistical analysis, the discharger shall, proceed sequentially down the list of statistical analysis methods listed under F.1A of this MRP, using the first method for which the data qualifies. If the initial statistical/ nonstatistical analysis tentatively indicates the detection of a release, the discharger shall implement the retest procedure under F.3 of this MRP.
 - a. <u>Statistical Methods</u>. The discharger shall use one of the following statistical methods to analyze COC or Monitoring Parameters which exhibit concentrations which equal or exceed their respective MAL in at least ten percent of the background samples taken during that Reporting Period. Except for pH, which uses a two-tailed approach, the statistical analysis for all constituents and parameters shall be one-tailed [testing only for statistically significant increase relative to background]:
 - 1) One-Way Parametric Analysis of Variance (ANOVA), followed by multiple comparisons [23 CCR §2550.7(e)(8)(A)]. This method requires at least four independent samples from each Monitoring Point and Background Monitoring Point during each sampling episode. It shall be used when the background data for the parameter or constituent, obtained during a given sampling period, has not more than 15% of the data below the PQL. Prior to analysis, replace all "trace" determinations with a value halfway between the PQL and the MDL values reported for that sample run, and replace all "non-detect" determinations with a value equal to half the MDL value reported for that sample run. The ANOVA shall be carried out at the 95% confidence level. Following the ANOVA, the data from each downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis [i.e., that there is no release] to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated for that parameter or constituent and shall immediately implement the retest procedure under F.3 of this MRP;

- 2) One-Way Non-Parametric ANOVA (Kruskal-Wallis Test), followed by multiple comparisons. This method requires at least nine independent samples from each Monitoring Point and Background Monitoring Point; therefore, the discharger shall anticipate the need for taking more than four samples per Monitoring Point, based upon past monitoring results. This method shall be used when the pooled background data for the parameter or constituent, obtained within a given sampling period, has not more than 50% of the data below the POL. The ANOVA shall be carried out at the Following the ANOVA, the data from each 95% confidence level. downgradient Monitoring Point shall be tested at a 99% confidence level against the pooled background data. If these multiple comparisons cause the Null Hypothesis (i.e., that there is no release) to be rejected at any Monitoring Point, the discharger shall conclude that a release is tentatively indicated for that parameter or constituent and shall immediately implement the retest procedure under F.3 of this MRP; or
- 3) Method of Proportions. This method shall be used if the "combined data set" -- the data from a given Monitoring Point in combination with the data from the Background Monitoring Points -- has between 50% and 90% of the data below the MDL for the constituent or parameter in question. This method: (1) requires at least nine downgradient data points per Monitoring Point per Reporting Period, (2) requires at least thirty data points in the combined data set, and (3) requires that n * P > 5 [where n is the number of data points in the combined data set and P is the proportion of the combined set that exceeds the MDL1; therefore, the discharger shall anticipate the number of samples required, based upon past monitoring results. The test shall be carried out at the 99% confidence level. If the analysis results in rejection of the Null Hypothesis [i.e., that there is no release, the discharger shall conclude that a release is tentatively indicated for that constituent or parameter and shall immediately implement the retest procedure under F.3 of this MRP; or
- Non-Statistical Method. The discharger shall use the following non-statistical method for analyzing all constituents which are not amenable to statistical analysis by virtue of having being detected in less than 10% of applicable background samples. A separate variant of this test is used for the VOC_{water} Composite Monitoring Parameter and for qualifying Constituents of Concern. Regardless of the test variant used, the method involves a two-step process: [1] from all constituents to which the test variant applies, compile a list of those constituents which exceed their respective MDL in the downgradient sample from a given Monitoring Point, then [2] evaluate whether the listed constituents meet either of the test variant's two possible triggering conditions. For each Monitoring Point, the list described above shall be compiled based on either: the data from the single sample (for that constituent) taken during that Reporting Period from that

Monitoring Point, or (where several independent samples have been analyzed for that constituent at a given Monitoring Point) the data from the sample which contains the largest number of detected constituents. Background shall be represented by the data from all samples taken from the appropriate Background Monitoring Points during that Reporting Period (at least one sample from each Background Monitoring Point). The method shall be implemented as follows:

- a. Version for the Volatile Organics Composite Monitoring Parameter For Water Samples [VOC_{water}]: For any given Monitoring Point, the VOC_{water} Monitoring Parameter is a composite parameter addressing all detectable VOCs, including at least all 47 VOCs listed in Appendix I to 40 CFR 258. The discharger shall compile a list of each VOC which (A) exceeds its MDL in the Monitoring Point sample, and also (B) exceeds its MDL in less than ten percent of the samples taken during that Reporting Period from that medium's Background Monitoring Points. The discharger shall conclude that a release is tentatively indicated for the VOC_{water} Composite Monitoring Parameter if the list either (A) contains two or more VOCs equals or exceeds its MDL, or (B) contains one VOC that equals or exceeds its POL;
- b. Version for Constituents of Concern: As part of the Constituent of Concern monitoring effort required under E.3, for each Monitoring Point, the discharger shall compile a list of constituents of concern that exceed their respective MDL at the Monitoring Point yet do so in less than ten percent of the background samples taken during that Reporting Period. The discharger shall conclude that a release is tentatively indicated if the list either (A) contains two or more constituents equals or exceeds its MDL or (B) contains one constituent which equals of exceeds its PQL.
- 3. Discrete Retest [23 CCR §2550.7(e)(8)(E)]. In the event that the discharger concludes that a release has been tentatively indicated [under F.1 or F.2], the discharger shall collect two new suites of samples (for VOC_{water} or for the indicated Constituent(s) of Concern) from the indicating Monitoring Point within 30 days of such indication. Resampling of the Background Monitoring Points is optional. As soon as the retest data is available, the discharger shall use the same statistical method [or non-statistical comparison] as that which provided the tentative indication of a release to separately analyze each of the two suites of retest data for the affected Monitoring Point. For any indicated Monitoring Parameter or COC, if the test results of either [or both] of the retest data suites confirms the original indication, the discharger shall conclude that a release has been discovered and shall carry out the requirements of Section G of this Monitoring and Reporting Program. All retests shall be carried out only for those Monitoring Point(s) at which a release is tentatively indicated, and only for the COC or Monitoring Parameter which triggered the indication there, as follows:

- a. If a (parametric or non-parametric) ANOVA method was used in the initial test, the retest shall involve only a repeat of the multiple comparison procedure, carried out separately on each of the two new suites of samples taken from the indicating Monitoring Point;
- b. If the Method of Proportions statistical test was used, the retest shall consist of a full repeat of the statistical test for the indicated constituent or parameter, carried out separately on each of the two new suites of samples from the indicating Monitoring Point;
- c. If the non-statistical method was used:
 - 1) Because the VOC_{water} Composite Monitoring Parameters is a single parameter which addresses an entire family of constituents likely to be present in any landfill release, the scope of the laboratory analysis for each of the two retest samples shall include all VOCs detectable in that retest sample. Therefore, a confirming retest for either parameter shall have validated the original indication even if the detected constituents in the confirming retest sample(s) differs from those detected in the sample which initiated the retest;
 - 2) Because all COC that are jointly addressed in the non-statistical test under F.2b of this MRP remain as individual COC, the scope of the laboratory analysis for the non-statistical retest of COC shall address only those constituents detected in the sample which initiated the retest.

G. RESPONSE to VOC DETECTION in BACKGROUND

- 1. Except for VOCs validated as not originating from the landfill, under G.3, any time the laboratory analysis of a sample from a Background Monitoring Point, sampled for VOCs under E.1, shows either (1) two or more VOCs at or above their respective MDL, or (2) one VOC at or above its respective PQL, then the discharger shall immediately notify the Regional Board by phone that possible background contamination has occurred, shall follow up with written notification by certified mail within seven days, and shall obtain two new independent VOC samples from that Background Monitoring Point and send them for laboratory analysis of all detectable VOCs within thirty days. If either or both these retest samples validates the presence of VOC(s) at that Background Monitoring Point, using the above procedure, the discharger shall:
 - a. Immediately notify the Regional Board about the VOC(s) verified to be present at that Background Monitoring Point, and follow up with written notification submitted by certified mail within seven days of validation; and
 - b. Within 180 days of validation, submit a report, acceptable to the Executive Officer, which examines the possibility that the detected VOC(s) originated from the Unit (e.g., using concentration gradient analyses) and proposes appropriate changes to the monitoring program.
- 2. If, after reviewing the report submitted under G.1b of this MRP, the Executive Officer determines that the VOC(s) detected originated from a source other than the Unit, the Executive Officer will make appropriate changes to the monitoring program.
- 3. If, after reviewing the report submitted under G.1b, the Executive Officer determines that the detected VOC(s) most likely originated from the Unit, the discharger shall conclude that a release has been detected and shall immediately begin carrying out the requirements of C.2d of this MRP.

H. REPORTING

Monitoring reports shall be submitted to the Executive Officer in accordance with the following schedule:

Report Frequency	Report Period	Report Due
Semiannually	October- March April - September	April 30 October 31
Annually	April - March	April 30

Monitoring reports shall be submitted to:

California Regional Water Quality Control Board San Diego Region 9771 Clairemont Mesa Blvd., Suite B San Diego, CA 92124-1331

Ordered by

Arthur L. Coe Executive Officer

RUFFNER ST. STATE ROUTE 52 Θ LOCATION OF PROPOSED LEACHATE MONITORING WELLS LEGEND: INDICATES APPROXIMATE UNITS OF LANDFILL LOCATION OF PROPOSEO LANDFILL GAS MONITORING PROBES LOCATION OF PROPOSED LYSIMETER INDICATES PARCEL BOUNDARY LOCATION OF CITY OF SAN DIEGO GROUNDWATER MONITORING WELL ₿ CONVOY ST. MONITORING NETWORK ES ENGINEERING-SCIENCE SCALE: 1 - 200' Attachment No. 2 to Order 94-28

